

Application No. 10/713,120
Amendment dated September 27, 2006
Response to Office Action of June 1, 2006

Amendments to the Specification:

Amend the paragraph beginning on page 3, line 19 as follows.

The heating resistive thread is produced by applying from one to three coats of the resistive material to the synthetic thread described above at a mass ratio of ~~4,7:1~~ 1.7:1 and 2.8:1, respectively.

Amend the paragraph beginning on page 5, line 15 as follows.

Cotton, ~~Kevlar®~~, ~~Nomex®~~ KEVLAR®, NOMEX® or caprone threads may be used as the non-conducting material. The same materials, except cotton, and glass fiber may be used as the "nucleus" of the heating resistive threads.

Amend the paragraph beginning on page 15, line 8 as follows:

Fig. 8 shows another electric heating fabric 1 alternative. It consists of one distributing bus bar 5, two conducting bus bars 4, two zones 6 that serve as dielectric barriers, a large number of electric heating conductive resistive threads 2 and cotton or synthetic non-conducting threads 3. This alternative forms one heating field. The upper dielectric barrier separates distributing bus bar 5 from the heating field 7 15, and the lower dielectric barrier forms the heating field border along the cloth length. In this electric heating thread alternative, circuit breaker 13 is located in distributing bus bar 5 between

conducting bus bars 4 and, for the sake of convenience of connection, may be placed either at the center between conducting bus bars 4 or closer to one of them.

Amend the paragraph beginning on page 17, line 12 as follows.

In order to produce cloth with the operating properties according to the invention, a resistive conducting thread of a "shell-nucleus" structure is used, in which the "nucleus" is made from synthetic of glass fiber or fibers and the resistive "shell" is a polymer carbon-containing composite. The fiber itself may be monolithic ~~of~~ or present a combination of separate threads.

Amend the paragraph beginning on page 19, line 12 as follows.

Experiments aimed at optimization of the polymer resistive material composition showed that conductive threads with .2 - 180 kOhm/m linear electric resistance can be produced under the following conditions:

- the mass ratio of industrial ~~graphite~~ carbon produced from acetylene and colloid graphite should be maintained within the 1:1 - 1:1.4, respectively;
- the mass ratio of polyvinylidene fluoride thermosoftening plastic and carbon filler should be maintained within the 1:3 - 1:6, respectively;
- the mass ratio of polymer resistive material and primary thread should be maintained within the .2:1 - .65:1, respectively;